

**TECHNICAL FIELD**

The present invention relates to a kind of kitchen equipments, and more  
5 particularly, to a multifunctional ladle.

**BACKGROUND ART**

The ladle is normally used for scooping out food, such as solid food, liquid diet  
with solid, soup or the like. For example, function of the traditional ladle is single,  
10 while lack of other functions, such as screening, filtering, removing floating oil,  
funneling, straining, isolating, separating yolk from egg white, rapidly isolating the  
liquid and solids portion of the soup or the like. Therefore, the single function of the  
traditional ladle is not able to meet the user's requirements,

In order to meet such requirements, US 4,825,551 discloses a strainer lade,  
15 which is a combination ladle strainer wherein the strainer and ladle portions are  
separable and each portion is independently functionable as a ladle and a strainer,  
respectively. So such a strainer ladle only allows for liquid-solid separation of  
liquid-solid food mixtures.

CN2149165 and CN2163605 also disclose a combination of the ladle and the  
20 strainer, each of which is only used for liquid-solid separation.

CN87209706 discloses a five-purpose soup ladle, in which a single straining hole  
is provided on the bottom of the large ladle portion thereof while the hole may be  
blocked by a small ladle portion thereof, whereby stopping straining. The  
disadvantage of it is that it is difficult fully to pick up and remove the floating oil of  
25 the soup or in the meantime, a lot of delicious soup has also been picked up and  
removed.

## CONTENTS OF THE INVENTION

It is, therefore, an object of the present invention to provide a multifunctional ladle, which is easy to use and simple in construction, and multifunctional.

5       A multifunctional ladle in accordance with the present invention comprises a handle, a ladle body and a strainer ladle matched with the ladle body and a controlling device, by which separation of the strainer ladle from the ladle body and combination of the strainer ladle with the ladle body are performed, and at the time of the strainer ladle being separate from the ladle body turnover of the strainer ladle is made by hand,  
10       engaged with the ladle body by means of a fixing device. A control switch of the controlling device is mounted on the handle and the controlling device includes a rod member, one end of which is connected to the control switch through a spring and another end of which is connected to the strainer ladle via an elastic device.

      In the multifunctional ladle in accordance with the present invention, a straining  
15       hole is perforated on the bottom of the ladle body and a projection is provided on the bottom of the strainer ladle, which corresponds to the straining hole and is exactly blocked thereon by means of a spring force. Said spring lies inside the handle.

      In the multifunctional ladle in accordance with the present invention, a short handle is provided on the strainer ladle, on the back of which a screw base is mounted,  
20       and a screw is fixed on the screw base through the elastic device. Also, a positioning hole, which corresponds to the screw base and is a rectangle, is located at the handle near to the ladle body. The elastic device may be a spring or an U-shaped spring. The strainer ladle has a hollowed out structure, on which some arched and/or circular holes are arranged and at the bottom centre of which a solid circle having a diameter  
25       of a chicken's egg yolk is provided. Any one of the handle, the ladle body, the strainer ladle, and the rod member is made of a kind of material selected from the

group consisting of steel, stainless steel, wood, plastics, rubber, iron, copper, silver, gold, aluminum, aluminum alloy, zinc, zinc alloy, nickel or the like.

In accordance with the present invention, as the strainer and ladle body portions are separable and combinable, solids and liquid are readily separated from a liquid, solids mixture. When separated, it is capable of functioning as a funnel, a strainer ladle, a separator or a screening and filtering means, while when combined, it is capable of scooping up a liquid, solids mixture. In the latter case, in order to enable solids and liquid to be separated from the liquid, solids mixture, it may be carried out only by means of separating the strainer from the ladle body. Thus, separation of yolk from egg white, rapid isolation of floating oil and the soup or the like may be performed in a similar manner.

## DESCRIPTION OF FIGURES

An embodiment of the present invention will now be described in detail, by way of example, in reference to the following drawings in which:

Fig. 1 is a perspective view of a strainer ladle in accordance with the present invention;

Fig. 2 is a perspective view of a ladle body connected to one end of a handle in accordance with the present invention;

Fig. 3 is a partial view of a connection and fixture device used in between the strainer and the ladle body;

Fig. 4 is a perspective view of the multifunctional ladle in a combined position in accordance with the present invention;

Fig. 5 is a perspective view of the multifunctional ladle in a separated position in accordance with the present invention; and

Fig. 6 is a perspective view of the strainer to be turned over for cleaning.

## MODE OF CARRYING OUT THE INVENTION

As shown in Fig.1, in a preferred embodiment of the present invention, the strainer ladle 3 has a bowl-shaped straining body and a short handle 9 which is integral with the ladle body. A screw base 10 is arranged on the back of the short handle 9. The strainer ladle also takes such a shape to match with the straining body. A solid circle member having a diameter of a chicken's egg yolk is provided on the bottom centre thereof. Some arched and/or circular holes are arranged around the solid circle member, a diameter of which depends on the design requirements. Main principle is that the liquid diet such as soup or the like may flow out of the strainer ladle through such some holes, while the solid or semiliquid diet is not able to flow out and is retained in the strainer ladle 3. A projection 12 is arranged on the back of the strainer ladle 3 and under the solid circle member.

Referring to Fig. 2, a multifunctional ladle in accordance with the present invention comprises a handle 1 and a ladle body 2 connected to one end of the handle and being integral with the handle 1 therein the ladle body 2 is in the form of a bowl or other shapes and is configured and sized for matching with the strainer ladle 3. The size of strainer ladle 3, of course, may be larger than or smaller than that of the ladle body 2 without having an effect on separation of solid or liquid diet. A straining hole 11 is perforated on the bottom of the ladle body 2, which corresponds to the projection 12, and is exactly blocked by means of the projection 12, whereby flowing liquid diet out form the ladle body 2.

A movable control switch is mounted on the handle 1 and inside the handle 1 a spring is provided. A rectangular positioning hole 4 on the handle 1 is near to the ladle body 2. The positioning hole 4, of course, is also in other shape.

As show in Fig. 3, a controlling device 6 includes a rod member 7, one end of

which is connected to the control switch through a spring 5 and another end of which is extended out the handle 1 and connected to the screw base 10 through an elastic device 8. The control switch is mounted outside the handle 1. The movement of rod member 7 is carried out by means of up and down movement of the control switch.

5 The elastic device 8 is a spring or an U-shaped spring.

When combination of the strainer ladle 3 with the ladle body 2 is made by means of a fixing device, the screw base 10 on the back of the short handle 9 of the strainer ladler 3 is extended through the rectangular positioning hole 4, while the short handle 9 is located on the positioning hole 4. Meanwhile, the fixing device such as a screw 10 13 is screwed in the screw base 10 through the elastic device 8 in order to engage the strainer ladle 3 with the lade body 2. The short handle 9 and the screw base 10 are also in other shape being connectable to the handle 1.

Combination of the strainer ladle 3 with the ladle body 2 and separation of the strainer ladle 3 from the ladle body 2 are shown in Figs. 4 and 5 respectively. When 15 the control switch is moved up, the strainer ladle 3 is also moved up by movement of the rod member 7, whereby separating the strainer ladle 3 from the ladle body 2. Simultaneously, the projection 12 of the strainer ladle 3 is divorced from the straining hole 11 of the ladle body 2, thus flowing liquid diet out, as show in Fig. 5. When the control switch is moved down, the strainer ladle 3 is engaged with the ladle body 2 20 and at the same time the straining hole 11 is exactly blocked by the projection 12 under the elastic force applied by the spring 5, whereby using for scooping the soup.

As show in Fig. 5, the multifunctional ladle can be used as a funnel, a strainer ladle, a separator, or a screening and filtering means because the strainer ladle 3 has a hollowed out structure and the ladle body 2 has a straining hole. As shown in Fig.4, 25 the soup and the solid food may be scooped up as the straining hole 11 of the ladle body 2 has been exactly blocked by the projection 12 of the strainer ladle 3. At that

time, if the control switch is moved up, as shown in fig. 5, the soup will be flowed out.

In the same way, the chicken's egg yolk may be isolated from egg white and the floating oil may be separated from the soup.

As shown in Fig. 6, if the control switch is moved up and at the same time  
5 turnover of the strainer ladle is performed by hand, it is easy to clean the strainer ladle  
3.

In this embodiment of the present invention, any one of the handle, the ladle  
body2, the strainer ladle 3 and the rod member 7 is made of a kind of material, but not  
limited to, selected from the group consists of steel, stainless steel, wood, plastics,  
10 rubber, iron, copper, silver, gold, aluminum, aluminum alloy, zinc, zinc alloy, nickel  
or the like.